

Control Data® 9715-340 Fixed Storage Drive (FSD)

Designed for Original Equipment Manufacturers (OEM)

4/83
CD
CONTROL
DATA

MAY

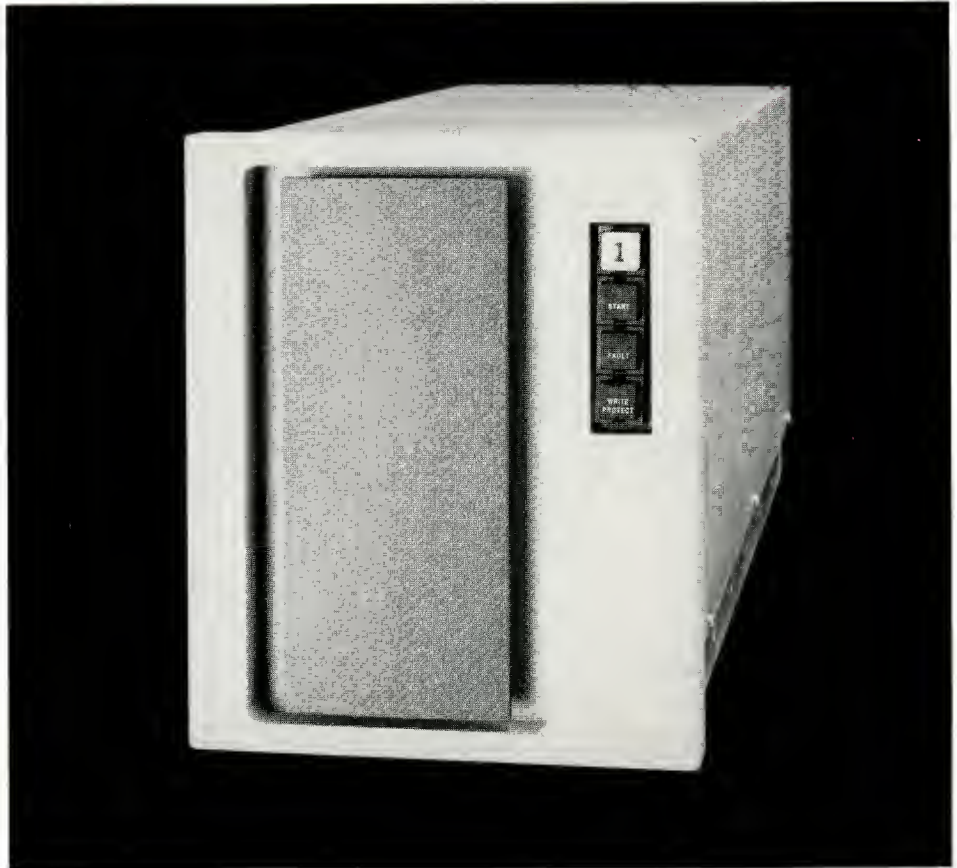
1983

The Control Data 9715-340 Fixed Storage Drive (FSD) is a 230-millimeter (9-inch) rigid disk drive that provides 344 megabytes of unformatted storage in a sealed module. Drive characteristics include 20 millisecond average seek time, approximately 250 watts power consumption and one-half rack size.

The 9715-340 operates with the industry standard Storage Module Drive (SMD) interface that provides compatibility with other Control Data disk drives operating at 9.67 megahertz. A direct coupled, DC brushless drive motor and universal power supply permit worldwide use of the 9715-340. Physical dimensions of the drive allow side-by-side mounting, providing 680 megabytes of storage in a standard 483 millimeter (19-inch) RETMA rack enclosure.

Features

- Selectable address (address plug 0-3)
- 20 millisecond average seek
- Rack mountable
- Detachable universal power supply
- Low maintenance cost
- High MTBF
- SMD interface compatibility
- Automatic carriage and spindle lock
- High performance linear actuator
- Phase-locked data separation
- NRZ to MFM data conversion
- Fixed or variable sectoring (address mark)
- Daisy-chain interface capability
- Dual channel capability
- UL, CSA, VDE standards
- FCC Class A compliance



Description

The 9715-340 FSD consists of seven disks in a sealed module, a direct coupled DC brushless motor with digital speed control, linear actuator, universal power supply, DC cooling fan. The logic package uses low-power Schottky, I²L, ECL and LSI technology. All read/write, fault, transmitter/receiver and microprocessor-controlled servo electronics are contained within the logic package.

Applications

- Business control systems
- CAD/CAM automation systems
- Communications systems
- Word processing

- Terminal systems
- Scientific, medical and instrumentation systems

Accessories

- Rack-mounting slides
- Terminator
- Input/output cables
- DC cables
- Bar mounting kit
- Address select plug (4-7)
- Maintenance manual

Options

- Dual-access feature
- Power supply

Specifications

Capacity (unformatted)	344 Mbytes
Per Track	20,160 bytes
Per Cylinder	483,840 bytes
Cylinders Per Drive	711
Number of Disks	7
Data Surfaces	12
Servo Surfaces	1
Data Heads	24
Transfer Rate	9.677 MHz
Spindle Speed	3,600 r/min
Recording	
Bit Density	9.1 Mbits/in ²
Bits Per Inch	9,492
Tracks Per Inch	960
Recording Method	NRZ TO MFM data conversion
Access Time	
Full Stroke	45 ms
Average	20 ms
Track-to-Track	5 ms
Positioning Method	Linear voice coil actuator
Data Reliability	
Recoverable Read Errors	Less than 1 in 10 ¹⁰ bits transferred
Unrecoverable Read Errors	Less than 1 in 10 ¹² bits transferred
Seek Errors	Less than 1 in 10 ⁶ bits transferred
Drive Reliability	
MTBF	15,000 hours, 11,250 hours, including power supply
Service Life	5 years
Preventive Maintenance	None
Adjustments	None
Power	
AC	100, 120, 208, 220, 230 and 240 V, 50 or 60 Hz
DC	± 5 V logic, ± 24 V control addressing, + 40 V spindle motor
Power Dissipation	Approx. 250 W
Environmental	
Operating Temperature	10°C to 45°C (50°F to 114°F)
Non-Operating Temperature	– 40°C to 60°C (– 40°F to 140°F)
Operating Humidity	20% to 80%
Physical Characteristics	
Height	259 mm (10.2 in)
Width	216 mm (8.5 in)
Depth	762 mm (30 in) with power supply 610 mm (24 in) without power supply
Weight	31 kg (70 lb), drive 37 kg (82 lb), including power supply

Specifications subject to change without notice.

Control Data sales offices are located in principal cities throughout the world.

Control Data Corporation
OEM Product Sales
P.O. Box 0
Minneapolis, MN 55440 U.S.A.